

Figure 1A

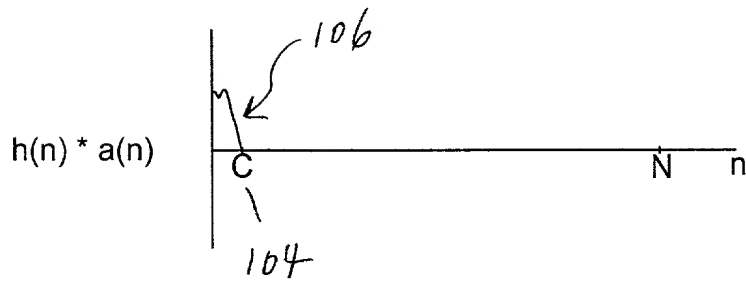


Figure 1B

200

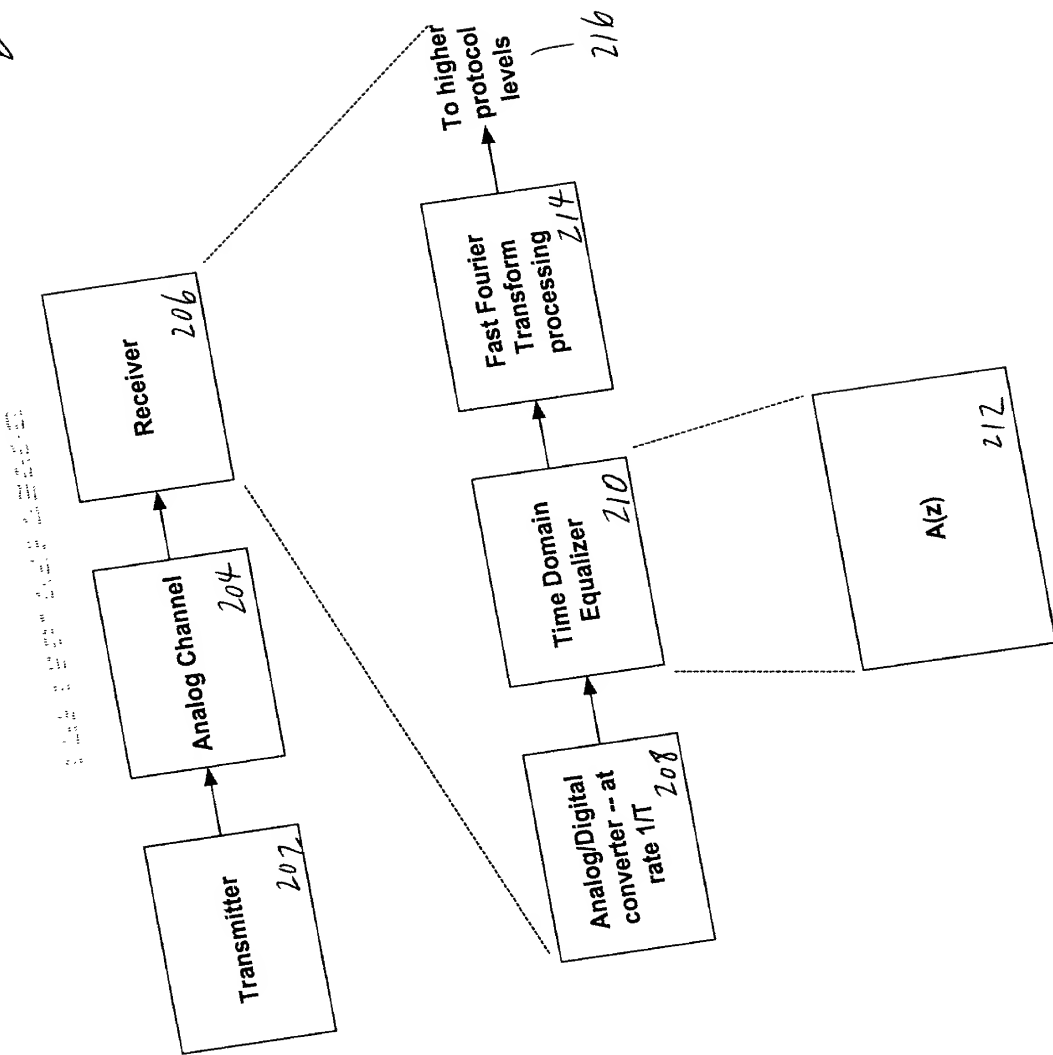


Figure 2

300

Figure 3 shows a block diagram of a system 300 for transmitting and receiving signals. The system includes a Transmitter 301 and a Receiver 309. The Transmitter 301 receives an input signal $\delta(n)$ and processes it through a Channel 303 and a block $H(z)$ 302 to produce a signal $h(n)$. This signal $h(n)$ is then processed by a block $A(z)$ 306 to produce a signal $h(n) * a(n)$. The Receiver 309 receives a signal $E(z)$ 310 and processes it through a block $B(z)$ 306 to produce a signal $b(n)$. The signal $b(n)$ is then processed by a block $A(z)$ 306 to produce a signal $h(n) * a(n)$. The signals $h(n) * a(n)$ and $h(n) * a(n)$ are then summed at a summing junction 308 to produce the final output signal $e(n)$.

Receiver 309

Transmitter 301
Channel 303

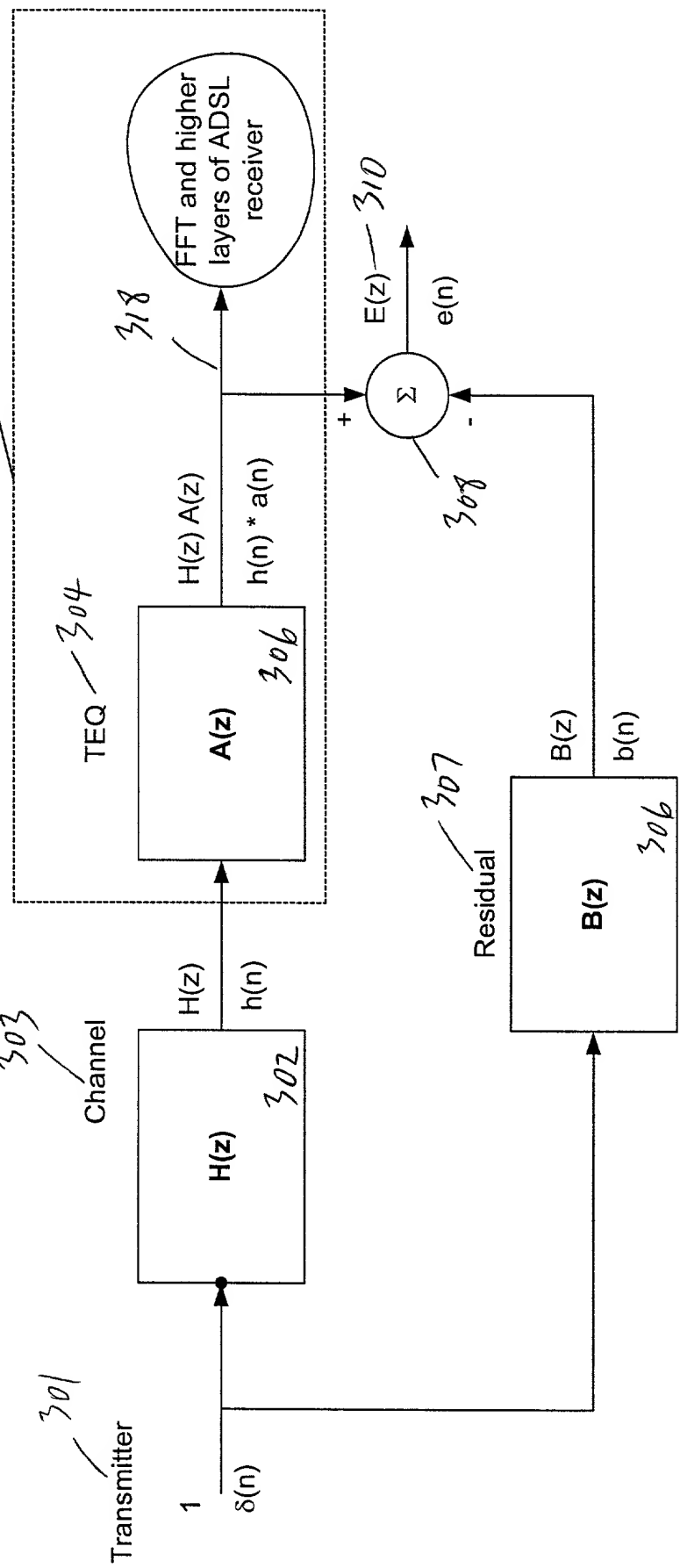


Figure 3

400

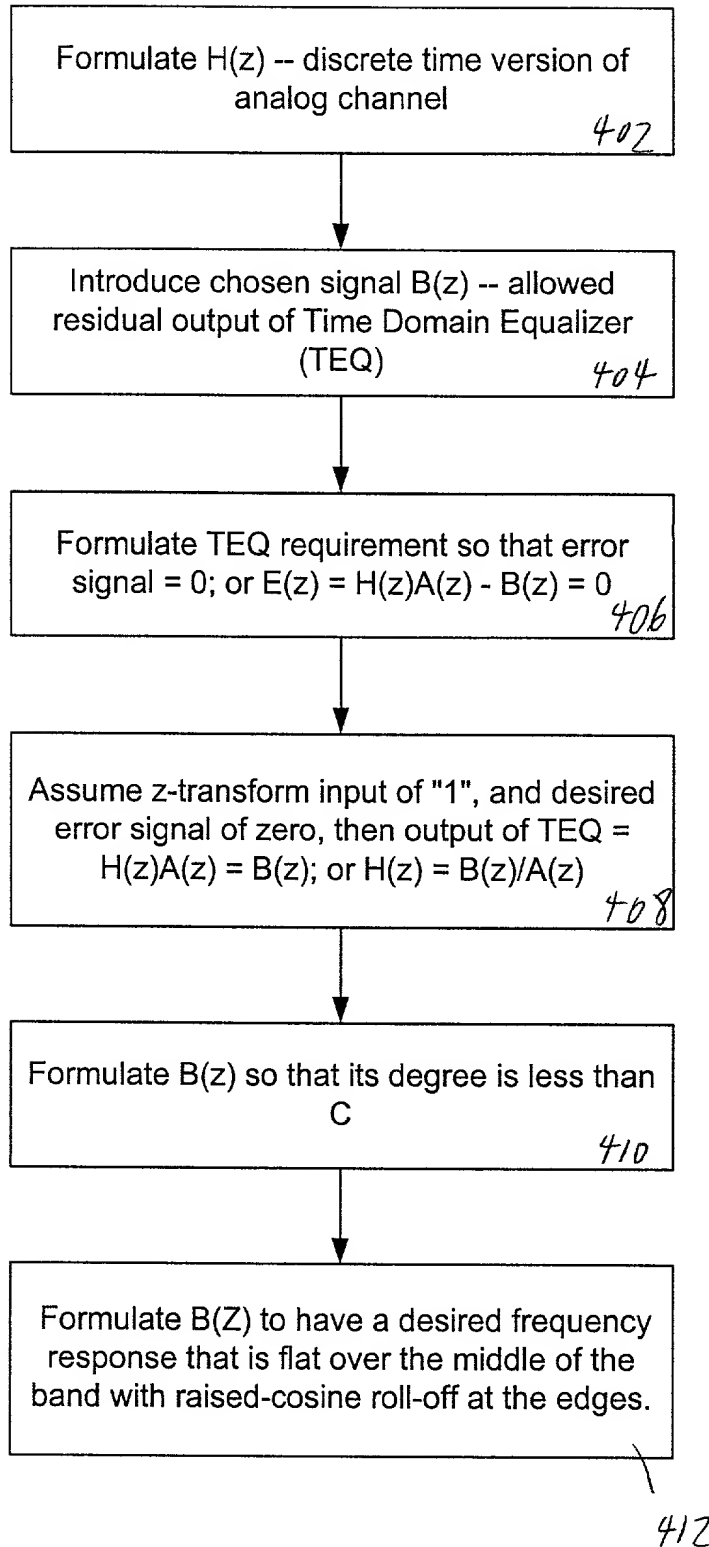


Figure 4

Formulate $B(z)$

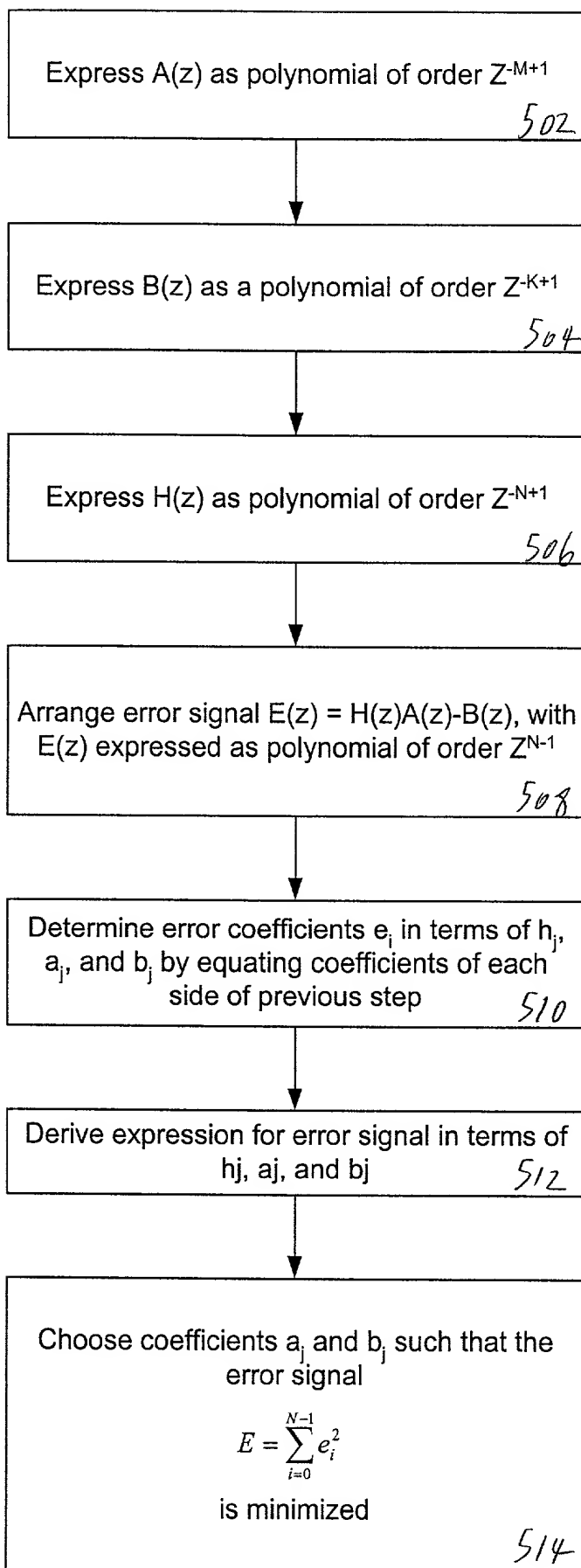


Figure 5

Minimize error signal

600

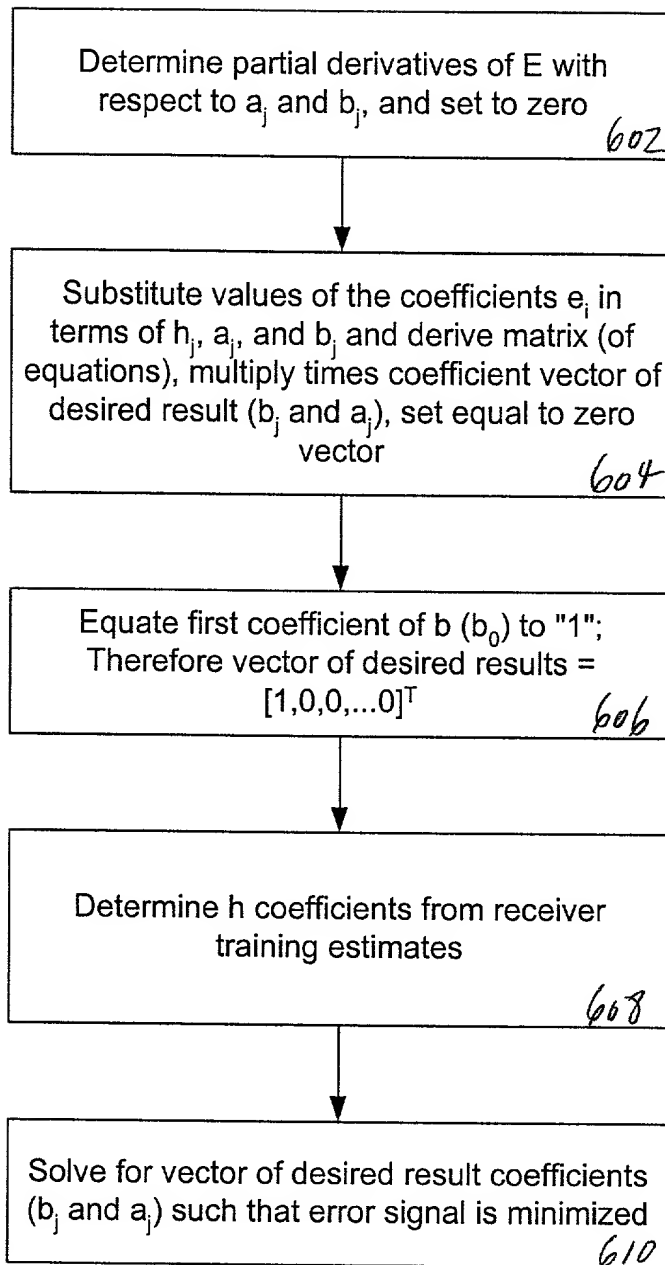


Figure 6